AMSAT News Service Weekly Bulletins
Issue: ANS-002
Date: 2021-12-30
Sources: amsat-ans-2021-ans-002-weekly-hyperkitty-11ab1f6f86.txt

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AMSAT NEWS SERVICE
ANS-002
The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

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ANS-002 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 Jan 02

HamSCI invites abstracts for its 2022 Workshop

The ARRL report that HamSCI is soliciting abstracts for the 2022 HamSCI Workshop. The submission deadline is February 1, 2022. The workshop will be a hybrid (in-person and virtual) event from March 18 – 19, 2022, at the US Space and Rocket Center in Huntsville, Alabama.
“The primary objective of the HamSCI workshop is to bring together the amateur radio community and professional scientists,” said HamSCI Lead Nathaniel Frissell, W2NAF, an assistant professor within the Department of Physics and Electrical Engineering at The University of Scranton.
“This year’s theme is ‘The Weather Connection,’ with invited speakers Tamitha Skov, WX6SWW, and Jim Bacon, G3YLA.”
"Skov and Bacon will present tutorials on the impacts of space and terrestrial weather on the ionosphere. Chen-Pang Yeang, an associate professor and director for the Special Project on Scientific Instruments at the University of Toronto, will deliver the keynote address, “Ham

Radio and the Discovery of the Ionosphere.” Additional information is available at: https://bit.ly/3EHDAe5

[ANS thanks ARRL News for the above information]

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Ron Parsons, W5RKN Has announced that he is retiring as the author of the VUCC Awards and Endorsments list. He says: "Jon Goering, N7AZ has offered to take over on February 1. I will pilot on January 1 with Jon as copilot. I was happy to have done the task for the past few years and wish Jon equal pleasure. My method is completely manual, so someone might want to automate. An AMSAT member who wishes help Jon should reach out to him.
Many Thanks to Ron who has done a great job of organizing and keeping up with VUCC activities!
Ron reports: "Here are the endorsements and new VUCC Satellite Awards issued by the ARRL for the period December 1, 2021 through January 1, 2022. Congratulations to all those who made the list this month!
This is my last time preparing this list. Next month it will be done by Jon Goering, N7AG."

CALL	Dec.	January
K8TL	1012	1016
WN9Q	710	783
K9UO	675	695
XE1HG	100	639
N5BO	580	635
KN2K	401	450
N6UTC	400	450
EA2AA	396	400
VU2LBW	350	400
N8URE (FM19)	279	326
NA1ME	275	300
K8BL	283	292
RA3DNC	252	276
K3HPA	176	201
M0NKC	200	New
WD9EWK (DM23)	173	182
DL6KBG	150	175
A65BR	New	157
WA7HQD	150	151
K6MX	New	134
KG7CW	New	115
K9AQ	New	109
N6UTC(MOJAVE)	New	101
KE6LB	New	100
W4GLU	New	100

"This list was developed by comparing the ARRL .pdf listings for the two months. Apologies if your call was not mentioned. Thanks to all those who are roving to grids that are rarely on the birds. They are doing a lot of the work! Ron W5RKN"

[ANS thanks Ron Parsons, W5RKN, for the above information]]

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Drew Glasbrenner, AMSAT VP Operations / OSCAR Number Administrator, has announced the OSCAR assignment: "On December 26, 2021, the XW-3 (CAS-9) satellite was launched on a CZ-4C launch vehicle from the Taiyuan Satellite Launch Center, China. Also known as Hope-3, XW-3 (CAS-9) was developed by the Chinese Amateur Satellite Group (CAMSAT) in cooperation with the Chinese government's aerospace and education departments, and is used to provide services to amateur radio enthusiasts around the world and to educate students in science and technology. CAMSAT completed the design and manufacture of the amateur radio payload and manages the satellite in-orbit operation.
At the request of CAMSAT and the XW-3 (CAS-9) team, AMSAT hereby designates XW-3 (CAS-9) as Hope-OSCAR 113 (HO-113). We congratulate the owners and operators of HO-113, thank them for their contribution to the amateur satellite community, and wish them continued success on this and future projects."

Alan Kung, BA1DU announced the launch success and the initial TLE for CAMSAT XW-3 (CAS-9) late last Saturday. Early reports of telemetry and contacts came in quickly. Please see the current TLE for corrected values. Nico Janssen, PA0DLO, Provided additional information: "Doppler measurements show that XW 3 (CAS 9) is object 50466 (2021-131B).
Frequency CW beacon: 435.57515 MHz."
From the XW-3□CAS-9□Amateur Radio Satellite User's Manual
2 / 21 V1.0 by BA1DU:
UHF antenna: 1/4 wavelength whip antenna
CW telemetry beacon:
Frequency: 435.575MHz ●RF power: 20dBm ●CW rate: 22wpm
GMSK telemetry:
Frequency: 435.725MHz ●RF power: 23dBm ●Data rate: 4800bps
V/U mode linear transponder:
Uplink frequency: 145.870MHz ●Downlink frequency: 435.180MHz
RF power: 20dBm ●Bandwidth: 30kHz ●Spectrum inverted
Photo download should be available in the future.

The XW-3 (CAS-9) satellite user manual is available from the AMSAT website:https://bit.ly/3FH8lS2

Mike Sartoretti, KC2YSF has the following reminder for S.A.T. tracker users: "If you are using a sat tracker from CSN technologies we do have the TLE'S and frequencies for this satellite already in place. Just hit your TLE update button and you're ready to go, XW-3 or CAS-9."

Congratulations to CAMSAT for a successful launch.

[ANS thanks Drew Glasbrenner, KO4MA, AMSAT VP Operations / OSCAR Number Administrator, Alan Kung, BA1DU, Nico Janssen PA0DLO, and Mike Sartoretti, KB2YSI for the above information]

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NO-84 (PSAT) - NORAD Cat ID 40654 (The decay date was most likely 12-22-2021)

The following satellite has been added to this week's AMSAT TLE Distribution:
XW-3 (CAS-9) - NORAD Cat ID 50466 (Thanks to Nico Janssen, PA0DLO for the identification)

XW-3 (CAS-9) was launched December 25, 2021 from China’s Complex 9 on a Long March 4C rocket.

[ANS thanks Ray Hoad, WA5QGD, TLE Manager for the above information]

ARISS NEWS

Amateurs and others around the world may listen in on contacts between amateurs operating in schools and allowing students to interact with astronauts and cosmonauts aboard the International Space Station. The downlink frequency on which to listen is 145.800 MHz worldwide.

Upcoming ARISS Contact Schedule as of 2021-12-30

Scouts Victoria (Radio and Electronics Team), Mt Waverley, Victoria, Australia, via AB1OC. The ISS callsign is presently scheduled to be NA1SS. The downlink frequency is presently scheduled to be 145.800 MHz. The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The scheduled crewmember is Mark Vande Hei KG5GNP. Contact is go for: Tue 2022-01-04 11:27:32 UTC 60 deg

On the AMSAT-BB reflector, VE7JMN noted that the ISS has been tracking differently on websites and several programs. Charlie Sulfana AJ9N of the ARISS Operations Team offered this explanation: "The ISS apparently did a burn over the last day or so. As a result one of the upcoming ARISS contacts is now about 5 minutes sooner than what I originally posted. The latest amsat-bb posting I did this morning has the newest time. Maybe that is what you are seeing."

The next mode change to voice cross band repeater is expected to occur in early January, 2022.

The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors for the above information]

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+ 23rd annual Ham Radio University (HRU) educational conference will again be held as a virtual event on January 8, 2022

W2JV, Peter Portanova, will be giving a talk on "The Art of operating thru the FM Amateur Satellites" The goal of this forum is to at minimum give you the tools and the confidence to listen to a few satellite passes as a stepping stone to making contacts. The HRU announcement follows:

With Covid19 uncertainties precluding an in-person gathering for a second year, the 23rd annual Ham Radio University (HRU) educational conference will again be held as a virtual event – on Saturday, January 8, 2022 -- 8:00am to 3:00pm EST (12:00– 20:00 UTC) -- as a GoToWebinar on-line video conference. Advance Registration Required -- Starting December 20th 2021

HRU 2022 will be adding five forums, for a total of 19 presentations by experts in a broad range of Amateur Radio activities including: Amateur Radio Emergency Communications; Basics of HF Operating; Ham Radio Contesting and Dxing, Communicating Through Amateur Radio Earth Satellites; Software Defined Radios; HF and VHF Digital Communications; Parks on the Air, Skywarn, Cables & Connectors, and Using RaspberryPi Computers in Amateur Radio.

In addition to viewing the presentations, on-line attendees will have the opportunity to ask questions of the presenters.

Founded by Phil Lewis, N2MUN, who passed away in March, 2020, HRU also will be the on-line convention of the NYC-Long Island Section of ARRL - The National Association for Amateur Radio®

As in years past, participation in HRU 2022 will be free of charge, with an optional suggested donation of $5.00, but advance registration – starting December 20, 2021-- will be required for each presentation.

Further information, including the schedule of forums and advance registration starting December 20, 2021, is on line at: http://www.HamRadioUniversity.org

+Winterfest, the ARRL Midwest Division Convention
Collinsville, IL Jan 22 2022

+ARRL National Convention and Orlando Hamcation Feb 10-13 2022
Registration details at http://www.arrl.org/arrl-expo
Updates may be found at: https://www.amsat.org/other-events/

+AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

AMSAT Ambassador Clint Bradford, K6LCS, makes online presentations to Amateur Radio clubs and other interested organizations. He reports: "Seven presentations lined up to start the new year so far, including three clubs in Canada, and clubs in Florida, California, New York and Nevada!

Think a 90-minute lively, informative, and fun “How to Work the Easy Satellites” Zoom presentation would be appropriate for your convention or club? Always included are overviews of the ARRL, AMSAT, and ARISS. And pre-presentation questions are solicited and welcome.

Contact Clint at http://www.work-sat.com or by phone at 909-999-SATS (7287) to arrange a presentation.

[ANS thanks Paul Overn, KE0PBR, AMSAT Events page manager, Pete Portanova, W2JV, and Clint Bradford, K6CLS for the above information]

Satellite Shorts From All Over

+ CNES, French Space Agency Special Callsigns TM60CNES, TO60CNES, TX60CNES and TK60CNES for the 60th anniversary of CNES are activated since December 18, 2021 and until January 2, 2022 on different frequency bands and different modes. To know the activated callsigns (realtime) as well as their mode and frequency consult the AMSAT-F page : https://site.amsat-f.org/. A Google translation may be viewed from https://bit.ly/3HflGkA ANS thanks Christophe Mercier, President AMSAT-F, for the above information)

+ Starlink satellite’s near-collision with Chinese station puts focus on space jam. First reported by The Guardian, which cited experts as saying the Chinese action was unusual, the incident spotlights the growing risk in space, where orbital room is being crowded out by an astronomical race in which nation-states as well as private companies are increasingly active. Behind it are projects such as the Elon Musk-owned SpaceX’s Starlink constellation and rival Amazon’s Project Kuiper. Both companies want to create a web of low-earth orbit (LEO) spacecraft that will beam down internet connectivity to anywhere on the planet. And then there are several countries — Russia and India being the most recent — that have carried out tests of satellite-killing missiles, generating millions of pieces of debris. More is available at: https://bit.ly/3FFQz1c (ANS thanks Southgate News for the above information)

+ JWST is on its way to orbit L2! On Christmas Day, JWST launched successfully (video) aboard its Ariane 5 from French Guiana. During its flight, the rocket performed a unique sawtooth maneuver, rotating back and forth 30° to protect JSWT’s instruments from overheating due to direct solar illumination (as opposed to Apollo’s ‘BBQ roll’). After release, the spacecraft deployed its solar array—here’s a video, which likely includes the final close proximity image of the craft. Now beyond the orbit of the Moon, it has successfully performed two course corrections and deployed its gimbaled antenna assembly. Jonathan McDowell has a timeline of JWST's ongoing “30 days of terror” deployment schedule on its way to L2. The sunshield has started its multistep deployment and, in about a week, mirrors will begin unfolding. Check-in on its live mission dashboard to see where it is and what it’s doing, follow it on Twitter, or watch NASA’s Deep Space Network real-time dashboard to see active communications underway. Hopefully, the first images from Webb should be available by next summer. The Planetary Society has an excellet summary of the JWST mission at: https://bit.ly/3pG6045 (ANS thanks The Orbital Index for the above information.)

+ More JWST Coverage: Over the next two weeks, NASA will provide broadcast coverage and other updates on major deployment milestones for the James Webb Space Telescope, the world’s largest and most powerful space science telescope. Broadcasts of milestone events will air live on NASA TV, the NASA app, and the agency’s website: https://www.nasa.gov/live. NASA provides regular updates on the Webb telescope blog, https://blogs.nasa.gov/webb The public can also follow Webb’s deployments online via a “Where is Webb?” interactive tracker and a Deployments Explorer at https://go.nasa.gov/3eEkGdQ (ANS thanks NASA for the above information)

+ UVSQ-SAT: Transponder expected to be active on 01/01/2022 from 12:00 UTC. The LATMOS team has programmed the UVSQ-SAT satellite to go into

transponder mode on January 1, 2022 at 12:00 UTC.
The transponder will be active during 11 consecutive hours.
Frequencies used:
Telemetry:
437.020 MHz - BPSK - GR3UH 9k6
FM transponder :
Uplink frequency : 145.905 MHz
Downlink frequency: 437.020 MHz
More information on AMSAT Francophone https://site.amsat-f.org/uvsq-sat/

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Jack Spitznagel, KD4IZ
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